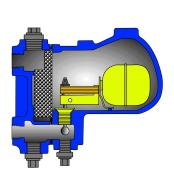
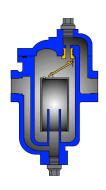
# **COMPARISON SHEET**

### **VELAN MFT STEAM TRAP VS. INVERTED BUCKET DESIGN**



**Velan MFT Steam Trap** 



**Inverted Bucket Steam Trap** 

#### **RAPID AIR VENTING**

At startup, the Velan steam trap is fully open, venting air quickly and efficiently. This results in a faster startup with fewer plant personnel required to supervise venting of main lines during warmup.

### **STELLITE 6 TRIM STANDARD**

All Velan steam traps are fitted with Stellite 6® seat facings to resist wear by high velocity flow, dirt and scale. Stellite 6® has 3 times the wear resistance of induction hardened stainless steel.

### **ENERGY EFFICIENT**

The Velan steam trap wastes no live steam during its operation. This can save a customer hundreds of dollars per trap annually.

## **MODULATED DISCHARGE**

The Velan steam trap modulates the condensate out of the system continuously. It is understood in industry that valves that modulate last much longer than valves that cycle on-off.

## **INTEGRAL CHECK VALVE**

The discharge valve in the trap acts as a check valve providing full back flow control.

## **NO PLUGGING**

The valve on the Velan steam trap is in the downstream position. All flashing of condensate occurs after it has passed through the orifice. Copper and Iron oxides will not foul or plug the orifice in the Velan steam trap.

## **NO WATER "PRIME" NEEDED**

Velan steam traps will operate efficiently regardless of load.

There is no water "prime" needed to keep the steam trap closed.

#### **POOR AIR VENTING**

The inverted bucket steam trap has poor air handling characteristics. Due to the fact that the orifice in the bucket must be restricted so it will float shut when live steam enters, it has difficulty passing the tremendous amount of air on start up. There may be external blow down needed to start up the steam line.

#### ALLOY TRIM NOT AVAILABLE

Inverted bucket steam traps are not available with cobalt based alloy trim.

### NOT ENERGY EFFICIENT

The inverted bucket steam trap requires 3 pounds of live steam to cycle. At current energy costs, this is an annual cost of \$ 250.00 per trap.

## BLAST ON – BLAST OFF DISCHARGE

The inverted bucket steam trap discharges condensate by blasting on and off. If the steam trap cycles 2 times per minute, that is over 1,000,000 cycles per year.

## NO CHECK VALVE AVAILABLE

The inverted bucket steam trap cannot prevent back flow. You MUST install a check valve.

# PLUGS DUE TO DIRT AND COPPER OXIDES

Due to the upstream valve position, condensate flashes inside of the orifice. Copper and Iron oxides chemically bond to the inside of the orifice, eventually closing the flow path. This leads to plugging, water-logging, and freezing.

## WATER "PRIME" NEEDED

Inverted bucket steam traps need a water "prime" to close the trap. If load fluctuate or superheat is introduced, the steam trap will fail open.